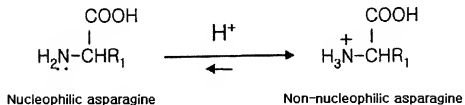


CLAIMS

1. (Currently amended) A method for the reduction of acrylamide formation, comprising the step of protonating a nucleophilic α -amino group ($-\text{NH}_2$) by treatment with a pH-lowering agent which is used for the treatment of foods or food ingredients, thereby converting into a non-nucleophilic amine ($-\text{NH}_3^+$), as shown in the following Scheme 2:

Scheme 2



, wherein R_1 is $-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{NH}_2$, and the pH of the treated foods or food ingredients is lowered by 0.1 - 3.0 pH units relative to intrinsic pH of the foods or food ingredients prior to the treatment.

2. (Cancelled)

3. (Cancelled)

4. (Original) The method of Claim 3, wherein the treatment foods or food ingredients with the pH-lowering agent is carried out before subjecting the foods to heat treatment.

5. (Original) The method of Claim 4, wherein the treatment foods or food ingredients with the pH-lowering agent is preformed by adding, mixing, spraying or soaking.

6. (Original) The method of Claim 4, wherein the heat treatment is selected from the group consisting of frying, baking, roasting, high temperature extrusion, and high temperature injection.

7. (Original) The method of Claim 3, wherein the foods contain at least one selected from the group consisting of amino acids, sugars and carbonyl compounds.

8. (Original) The method of Claim 7, wherein the foods are carbohydrate foods.

9. Cancelled)

10. (Currently amended) The method of ~~Claim 3~~ Claim 1, wherein the pH-lowering agent is added to the foods or food ingredients at a concentration of 0.001-10.0%.

11. (Currently amended) The method of ~~Claim 3~~ Claim 1, wherein the pH-lowering agent is selected from the group consisting of organic acid or its salt, buffer solution containing the organic acid or its salt, inorganic acid or its salt, buffer solution containing the inorganic acid or its salt, fruit juice, and a mixture thereof.

12. (Original) The method of Claim 11, wherein the organic acid is selected from the group consisting of citric acid, malic acid, acetic acid, lactic acid, succinic acid, tartaric acid, ascorbic acid, and adipic acid.

13. (Original) The method of Claim 11, wherein the inorganic acid is selected from the group consisting of phosphoric acid, hydrochloric acid, sulfuric acid and pyrophosphoric acid.

14. (Original) The method of Claim 11, wherein the salt of inorganic acid is monosodium phosphate or monopotassium phosphate.

15. (Original) The method of Claim 11, wherein the buffer solution is selected from the group consisting of sodium phosphate buffer solution, potassium phosphate buffer solution, citric acid-sodium citrate buffer solution, and citric acid-sodium phosphate buffer.

16. (Original) The method of Claim 11, wherein the fruit juice is selected from the group consisting of lemon juice, plum juice, apricot juice, orange juice, citron juice and lime juice.

17. (New) The method of Claim 1, wherein the pH-lowering agent consists essentially of citric acid.